

REMARKS

Summary of Office Action

Claims 1-7, 11, 12, and 16-19 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Nishimura (U.S. Pub. No. 2001/0002829) in view of Chiang (U.S. Pat. No. 6,271,822).

Claims 8, 9 and 20 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Nishimura in view of Chiang as applied to claims 1-7, 11, 12 and 16-19 above, and further in view of Applicant's admittance of prior art.

Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Nishimura in view of Chiang as applied to claims 1-7, 11, 12 and 16-19 above, and further in view of Gooding et al. (U.S. Pat. No. 4,580,265).

Summary of Amendment

Claims 1-9, 11-12, 14, 16-20 have been amended. No new matter has been added. Claims 10, 13, and 15 stand cancelled. Claims 1-9, 11-12, 14, 16-20 are pending for consideration.

All Claims Comply With §103

Claims 1-7, 11, 12, and 16-19 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Nishimura in view of Chiang. Claims 8, 9 and 20 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Nishimura in view of Chiang as applied to claims 1-

7, 11, 12 and 16-19 above, and further in view of Applicant's admittance of prior art. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Nishimura in view of Chiang as applied to claims 1-7, 11, 12 and 16-19 above, and further in view of Gooding et al. These rejections are respectfully traversed.

The previous rejections were maintained based on the premise that (1) the claim limitation does not limit the polarity to only two ports, and (2) Nishimura teaches in Fig. 8 where a two port polarity inverter can be used and further, each inverter has two ports. (FOA: p. 6, ¶6.) Applicants respectfully disagree. At least claims 16-20 specifically recite a "2-port data polarity inverter." Furthermore, FIG. 8 of Nishimura, reproduced below for convenience, does not teach a two port polarity inverter or that each inverter has two ports.

FIG. 8A

n	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Xn	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
Yn	H	H	H	H	H	H	H	L	L	L	L	L	H	H	H	H	H	L	L	L	L	L	L	L
Zn	H	H	H	H	H	H	H	L	L	L	L	L	H	H	H	H	H	L	L	L	L	L	L	L

FIG. 8B

n	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Xn	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
Yn	H	H	H	H	H	H	H	L	L	L	L	L	H	H	H	H	H	L	L	L	L	L	L	L
Zn	L	L	L	L	L	L	L	H	H	H	H	H	H	H	H	H	H	L	L	L	L	L	L	L

FIG. 8C

n	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Xn	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
Yn	H	H	H	H	H	H	H	L	L	L	L	L	H	H	H	H	L	L	L	L	L	L	L	L
Zn	L	L	L	L	L	L	L	H	H	H	H	H	H	H	H	H	L	L	L	L	L	L	L	L

FIG. 8D

n	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Xn	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
Yn	H	H	H	H	H	H	H	L	L	L	L	L	H	H	H	L	L	L	L	L	L	L	L	L
Zn	L	L	L	L	L	L	L	H	H	H	H	H	H	H	H	L	L	L	L	L	L	L	L	L

However, in the interest of advancing prosecution, claims 1-9, 11-12, 14, 16-20 have been amended to clarify the distinctions over the prior art of record.

As amended, claims 1-9 are allowable over the cited references in that each of these claims recite a combination of elements including, for example, “a first data inversion driver determining whether a number of transition of odd data having a plurality of bits is more than half of the bits of the odd data, and inverting the odd data in accordance with the determined result” and “a second data inversion driver determining whether a number of transition of even data having a plurality of bits is more than half of the bits of the even data and inverting the even data in accordance with the determined result.” None of the cited references including, Nishimura, Chiang, Applicant’s admittance of prior art, or Gooding et al., singly or in any combination, teach or suggest at least these features.

As amended, claims 11-12 and 14 are allowable over the cited references in that each of these claims recite a combination of elements including, for example, “dividing input data into an odd data and an even data,” “comparing current odd data with previous odd data and current even data with previous even data to determine a first data transition and a second data transition, respectively,” “determining g the number of first and second data transitions in the odd and even data, respectively,” and “inverting the odd and even data in accordance with the determined results, respectively.” None of the cited references including, Nishimura, Chiang, Applicant’s admittance of prior art, or Gooding et al., singly or in any combination, teach or suggest the features of the claimed invention.

As amended, claims 16-20 are allowable over the cited references in that each of these claims recite a combination of elements including, for example, “an odd data inversion driver to generate a first inversion signal to invert odd data when the number of a first data transition is more than a half of a total number of the odd data bit,” and “an even data inversion driver to generate a second inversion signal to invert even data when the number of a second data transition is more than a half of a total number of the even data bit.” None of the cited references including, Nishimura, Chiang, Applicant’s admittance of prior art, or Gooding et al., singly or in any combination, teach or suggest the features of the claimed invention.

Accordingly, Applicants respectfully request that the §103 rejections to claims 1-9, 11-12, 14, 16-20 be withdrawn and the claims passed to allowance.

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CONCLUSION

In view of the foregoing, reconsideration and timely allowance of the pending claims are respectfully requested. Should the Examiner feel that there are any issues outstanding after consideration of the response, the Examiner is invited to contact the Applicants' undersigned representative to expedite prosecution.

If there are any other fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-0310. If a fee is required for an extension of time under 37 C.F.R. 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

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Dated: October 12, 2007

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